DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 3/4/10 has been entered.

Status of Claims

2. Due to communications filed 3/4/10, the following is a non-final office action. Claims 53-57 and 61-67 are pending in this application and have been examined on the merits. Claims 53-57 and 61-67 are rejected as follows.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 53-57 and 61-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr et al (US5,608,446), and further in view of J.L. Alty et al's "Advanced Decision Environment for Process Tasks: Overview and Architecture", as cited by applicant.

As per claims 53, Carr et al discloses:

an input for receiving a service request for a service, (Col. 5, lines 19-25, keyboard/monitor, and input/output interface, w/col. 20, lines 14-21, shows user input for a request to switch to a high speed link);

Processing means for processing the service request, (Col. Col. 9, lines 61-64, service provider uses system to initiate a request);

negotiation means for use in establishing conditions applicable to provision, by one or more other agents in said multi-agent system, of one or more component processes involved in provision of the service, said negotiation means being adapted to assemble said conditions proactively by negotiation prior to receipt of said service request, (Col. 9, line 67-Col. 10, line 15, providing negotiations in order to allocated bandwidth without causing overload conditions, where the agents are represented by the plurality of service providers);

an up-datable data store/means to access said up-datable data store for storing said conditions when established and assembled, (Col. 9, lines 45-64, shows database works in conjunction with the negotiation means that includes the bandwidth capacity of each of the RF data channels of associated modulators, and that service providers are provided with an ongoing update of channel availability for each of the high speed RF channels available through modulators, and therefore, this means that at some point in time, an update must occur before a request is made since the updates are ongoing, and continuously occur throughout the entire process. Since updates are part of the negotiation process, this means that negotiations take place before a request is made in Carr et al as described by the "negotiation means" limitation above);

an output for providing a response to the service request, said response comprising a n indication of availability of the requested service, (Col. 15, lines 19-25, input/output interface, w/col. 10, lines 21-26, control processor mediates requests, w/col. 25, line 5-Col. 26, line 4, output transferred or source to destination);

where the processing means is adapted to process a service request by accessing one or more of the previously established conditions, for supply of component processes by said one or more other agents, in the data store, processing the request using the one or more established conditions and producing said response, (Col. 9, lines 5-15, checks database to determine if bandwidth capacity is available for the request, w/Col. 9, lines 60-67, assigning a specified bandwidth to accommodate data to be transmitted from the service provider to the user).

Carr et al does not specifically disclose a “composite” request or “composite” service request, however, first and foremost, J.L. Alty et al discloses in page 3, section 2.1, lines 7-8 that “It is essential that application services residing in a number of different physical and logical contexts can be shared and accessed transparently”, which represents a composite service. Also, on page 7, paragraph 3.2, J.L. Alty et al discloses that “To extend this model further, we consider how a number of agencies can be used in providing a service. The agent requesting the service is designated as the controlling agent and then a set of agents from different agencies can be selected to form a *virtual agency;* see figure 4. Note that this model reflects the principle of concurrent engineering whereby agents from different parts of a logical organisation may cooperate in the provision of some specific service", where in this case, the service requested by the agent represents the “composite” request or “composite” service request since the request involves more than one process through different physical and logical contexts that are components of the service, via agents from different parts of a logical organization.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose a “composite” request or “composite” service request with the motivation of processing service requests through more than one process that are components of the service.

As per claims 54/55, Carr et al:

Wherein one or more of said established conditions has an associated expiry time after which it is no longer applicable/Wherein the processing means is adapted to detect an expired or undefined condition in the data store, which condition is applicable to a component process used in the provision of the requested service, and to trigger the negotiation means to establish a substitute condition, (Col. 9, lines 53-62, after expiration is represented by outside of the given period of time for a specified bandwidth).

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 53.

As per claim 56, Carr et al discloses:
means to access said data store for storing data related to services offered by the agent and to one or more entities which have an interest in receiving information relating to one or more of said services, together with means to transmit information based on said data related to services to the one or more entities which have an interest, (Col. 9, lines 45-49, shows a database that works in conjunction with the negotiation means).

As per claim 57, Carr et al discloses:
which further comprises initiation means to initiate one or more component

processes in provision of a requested service, (Col. Col. 9, lines 61-64, service provider uses system to initiate a request);

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 53.

As per 61, Carr et al discloses:

Establishing conditions applicable to provision, by one or more other agents in said multi-agent system, of one or more component processes in a service,

proactively by negotiation prior to receipt of a request for said service, (Col. 9, line 67-Col. 10, line 15, providing negotiations in order to allocated bandwidth without causing overload conditions, in this case, the negotiations establishes conditions without going into overload, where the agents are represented by the plurality of service providers);

Accessing an up-datable data store and storing said component process supply conditions once established, (Col. 9, lines 45-64, shows database works in conjunction with the negotiation means that includes the bandwidth capacity of each of the RF data channels of associated modulators, and that service providers are provided with an ongoing update of channel availability for each of the high speed RF channels available through modulators, and therefore, this means that at some point in time, an update

must occur before a request is made since the updates are ongoing, and continuously occur throughout the entire process. Since updates are part of the negotiation process, this means that negotiations take place before a request is made in Carr et al as described by the "establishing conditions...prior to receipt" limitation above);

subsequently receiving a request for said service, (col. 20, lines 14-21, shows user input for a request to switch to a high speed link, and col. 9, lines 60-67, initiate a request)

Processing said service request by:

a)accessing one or more of said previously established conditions, for component process supply in the data store, (Col. 9, lines 5-15, checks database to determine if bandwidth capacity is available for the request, w/Col. 9, lines 45-49, shows database works in conjunction with the negotiation means); and

b)providing a response to the service request, said response comprising an indication of availability of the requested service dependent upon whether said one or more established conditions for component process supply is met, (Col. 9, lines 60-67, assigning a specified bandwidth to accommodate data to be transmitted from the service provider to the user).

Carr et al does not specifically disclose a “composite” request or “composite” service request, however, first and foremost, J.L. Alty et al discloses in page 3, section 2.1, lines 7-8 that “It is essential that application services residing in a number of different physical and logical contexts can be shared and accessed transparently”,

which represents a composite service. Also, on page 7, paragraph 3.2, J.L. Alty et al discloses that "To extend this model further, we consider how a number of agencies can be used in providing a service. The agent requesting the service is designated as the controlling agent and then a set of agents from different agencies can be selected to form a *virtual agency;* see figure 4. Note that this model reflects the principle of concurrent engineering whereby agents from different parts of a logical organisation may cooperate in the provision of some specific service", where in this case, the service requested by the agent represents the "composite" request or "composite" service request since the request involves more than one process through different physical and logical contexts that are components of the service, via agents from different parts of a logical organization.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose a "composite" request or "composite" service request with the motivation of processing service requests through more than one process that are components of the service.

As per claim 62, Carr et al discloses :

wherein one or more of said established conditions for the component process supply stored in said data store is applicable until advent of an expiry time associated

with said one or more conditions, (Col. 9, lines 53-62, after expiration is represented by outside of the given period of time for a specified bandwidth).

As per claim 63, Carr et al discloses :

further comprising the step, responsive to receipt of said service request, of finding whether any conditions for provision of component processes in said service are expired or undefined and substituting a substitute condition in the event that any such condition is found, (Col. 9, lines 53-56, w. col. 10, lines 1-15, update of channel availability (which includes bandwidth capacity) to prevent overload conditions, where bandwidth allocation is assigned for a specified bandwidth for a given period of time, where after expiry time is represented by outside of the given period of time for a specified bandwidth).

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 61.

As per claim 64, Carr et al discloses :

wherein said method further comprises the step of scheduling provision of said one or more component processes, said step being carried out after receipt of said request for said service, (Col. 23, lines 11-22, scheduling by scheduling server).

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 61.

As per claim 65, Carr et al fails to specifically disclose the following, however, does disclose first and second requests in col. 8, line 29-Col. 9, line 4, and therefore, it would be obvious to repeat the scheduling according to a service request based on conditions established under negotiations as described in independent claim 61, and as disclosed below:

re-schedule the component process; transmit a message to an entity which requested the service, indicating that ii) the service can only be provided under conditions different to previously established conditions for supply of said service; iii) re-assign the service to another service provider; or indicate to an entity which requested the service that the requested service cannot be provided

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to re-schedule the component process; transmit a message to an entity which requested the service, indicating that ii) the service can only be provided under conditions different to said previously established conditions; iii) re-assign the service to another service provider; or indicate to an entity which requested the service that the requested service cannot be provided, with the motivation of repeating a process for which multiple service requests have been received.

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 61.

As per claim 66, Carr et al discloses:

identifying component processes for use in provisioning the requested service, (Col. 17, lines 15-24, shows daemon process and slave process identified by connections to PC).

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 61.

As per claim 67, Carr et al discloses:

Initiating one or more of said component processes identified for use in the requested service, (Col. 17, lines 15-24, forwarding addresses via a "connect" message).

In this case, the combination of Carr et al and J.L. Alty et al discloses the composite service request as described above with respect to claim 61.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 571-272-6734. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the •Patent Application Information Retrieval (PAIR) system, Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

A. R. B.
March 31, 2010

/Akiba K Robinson-Boyce/
Primary Examiner, Art Unit 3628